AMENDMENTS TO THE SPECIFICATION

Kindly replace paragraph [0009] with the following amended paragraph:

[0009] Preferably, the first type valve is a solenoid valve. Also preferably, the inert gas is an argon gas or a nitrogen gas. The inflammable impurity includes phosphorous, hydrogen and magnesium. The vacuum pump preferably includes a turbo pump and a roughing pump. Regarding the at least one first type valve, one valve is directly connected to the ion generator, and others may be arranged at locations adjacent to the vacuum pump. Regarding the at least one second type valve, one valve is directly connected to the ion generator, and others may be arranged at locations adjacent to the vacuum pump.

Kindly replace paragraph [0010] with the following amended paragraph:

[0010] A preferred embodiment of the present invention further provides an evacuation method in an ion implantation system including an ion generator and a vacuum apparatus including a vacuum line. The method includes injecting an inert gas into an interior of the ion generator and the vacuum line to equalize internal and external pressures of the ion generator and the vacuum line; opening the ion generator to clean the inside thereof or to replace a damaged part; closing the ion generator; and injecting the inert gas into the interior of the ion generator and the vacuum line to remove the air from the interior of the ion generator and the vacuum line, so that oxygen does not react with an inflammable impurity inside the ion generator and the vacuum line. In this evacuation method the inert gas may be an argon gas or a nitrogen gas and the inflammable impurity may include phosphorus, hydrogen, and magnesium.

Kindly replace paragraph [0034] with the following amended paragraph:

[0034] In step 430, even though the roughing valve 46 is opened and the pumping operation is performed by the roughing pump 42, since the interior of the ion generator 100 and the vacuum line of the vacuum apparatus 200' are filled with an inert gas, i.e. e.g., argon gas, or nitrogen gas, the inert gas does not react with the inflammable impurities, so that an explosion does not occur, thereby leading to a safe operation.